

In the claims:

1. A radio network controller including a plurality of protocol layers, which comprises a plurality of blocks each formed of protocol layers obtained by segmenting said plurality of protocol layers and a UDP (User Datagram Protocol)/IPv6 (Internet Protocol version 6) layer which connects said plurality of blocks.
- 10 2. The radio network controller according to claim 1, wherein said plurality of protocol layers include at least a PDCP (Packet Data Convergence Protocol) layer, an RLC (Radio Link Control) layer which executes U (User)-plane data segmentation and concatenation, a MAC (Medium Access Control) layer and an FP (Frame Protocol) layer.
- 15 3. The radio network controller according to claim 2, wherein said plurality of protocol layers are segmented to execute QoS (Quality of Service) control taking said RLC layer into consideration.
- 20 4. The radio network controller according to claim 2 or claim 3, comprising a filtering function of detecting a start packet and an end packet each set in advance from said U-plane data to input data with said start packet and end packet excluded to a buffer and abandon

the data according to the detection result.

5. A QoS (Quality of Service) control method of a
radio network controller including a plurality of
5 protocol layers, where said plurality of protocol layers
are segmented into blocks to execute QoS control taking
an RLC (Radio Link Control) layer which executes U
(User)-plane data segmentation and concatenation into
consideration and connect these blocks by a UDP (User
10 Datagram Protocol)/IPv6 (Internet Protocol version 6)
layer.

6. The QoS control method according to claim 5,
wherein said plurality of protocol layers include at
15 least a PDCP (Packet Data Convergence Protocol) layer,
said RLC layer, a MAC (Medium Access Control) layer and
an FP (Frame Protocol) layer.

7. The QoS control method according to claim 5 or
20 claim 6, wherein by the control of a filtering function
of detecting a start packet and an end packet each set
in advance from said U-plane data, data with said start
packet and end packet excluded is input to a buffer and
abandoned according to the detection result.